

05/21

Work Order ID 161708***161708***

Page 1

Tuesday, May 23, 2017 9:31:41 AM

Item ID: 647.7811

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bracket B

Start Date: 6/1/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/10/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: DAS 21 Date: MAY 23 2017 Tooling: SPC (Y/N): Date:

QC: 9-89 Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
647.7800	A

100

0.00

100

BAND SAW

Bandsaw

Memo

0.38

Jeaspa Bandsaw

Cut Blank at 10.313"

4 0 DAS 44 9-89 17-06-29.

110

5.53

110

HAAS CNC VERTICAL MACHINING #1

HAAS 1

Memo

0.79

HAAS CNC vertical machine #1

1-Machine per folio FB408

DWG REV: A.

FOLIO REV: AA.

4 0 B. 17-07-02.

2- deburr and break all sharp edges

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Rast Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐									

Work Order ID 161708***161708***

Page 2

Tuesday, May 23, 2017 9:31:41 AM

Item ID: 647.7811

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bracket B

Start Date: 6/1/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/10/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120						4	0		B- 17-07-02
QC	Memo	0.40							
Quality Control									
130	QC8- Inspect parts - second check	0.00							
130						4	0		DAS 49 9-89
QC	Memo	0.80							17/07/31
Quality Control									
140	Outsource process-Anodize per QSI017 4.1.10.1	0.00							
140						4			W 17/07/12
Outsource4	Memo	720.00							
Outsource process - Anodize	Issue P/O to ATG : 37017								
	1- Black Anodize as per Dwg 647.7800								
	2- PRIME AS PER DWG, SEE NOTE #2								
	Certification of Conformity is required								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

Work Order ID 161708

161708

Page 3

Tuesday, May 23, 2017 9:31:41 AM

Item ID: 647.7811 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bracket B
 Start Date: 6/1/2017 Start Qty: 4.00 *4* Cust Item ID:
 Required Date: 6/10/2017 Req'd Qty: 4.00 *4* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* Packaging Packaging	Receive & Inspect for Damage & Mat'l Certs Memo	0.00 0.08							4K SP17-7-25
155 *155* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo 2.1 mils thickness primer	0.00 0.80							4 DAS 38 9-88 JUL 26 2017
180 *180* Packaging Packaging	Identify as per dwg & Stock Location <u>CCK0077A</u> Memo ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***	0.00 0.04							4 DAS 6 9-88 JUL 16 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐							
Misidentified ☐	Past Due ☐								

Work Order ID 161708

161708

Page 4

Item ID: 647.7811

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bracket B

Start Date: 6/1/2017 Start Qty: 4.00

4

Cust Item ID:

Required Date: 6/10/2017 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.40

Quality Control

DAS
21
9-89

JUL 26 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Rast Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Tuesday, May 23, 2017 9:31:40 AM

Work Order ID: 161708

161708

Parent Item: 647.7811

647 7811

Parent Item Name: Bracket B

Start Date: 6/1/2017

Required Date: 6/10/2017

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev A: RQ 15.08.06 Verified by: DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M7075T6B6.000X0.250

Purchased

No

100

f

5.7820

0.859

3.616842

DAS

M7075T6B6 000X0 250

**

44

9.89

17-06-29

7075-T6 BAR 6.000" X 0.250"

Location

Loc Qty

Loc Code

MAT005

5.782

M133426

3.083

M136103

2.699

137887

—————>

3.5'

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

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REVISIONS		
REV.	DESCRIPTION	DATE
1	LA 11 PROTOTYPE RELEASE: MPP	NC
2	INITIAL RELEASE	10/1/01
3	INCORPORATED ECH 03120, 04487, A 04328	03/02/10

NOTES:

- 1 MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- 2 FINISH IAW MPP-172 SECTION 3.3 & 4.3.
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161708 MWS
170523

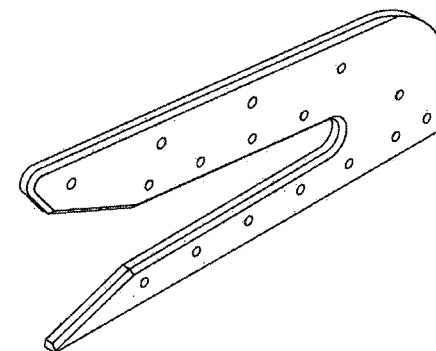
QTY	F/N	PART #	DESCRIPTION	MAT'L	SPEC
		647.7823	CROSS BRACKET AFT	△	△
		647.7822	EYE BOLT FITTING RH	△	△
		647.7821	EYE BOLT FITTING LH	△	△
		647.7820	CROSS BRACKET AFT	△	△
		647.7819	CROSS BRACKET FWD	△	△
		647.7818	MOUNTING CHANNEL	△	△
		647.7817	AFT BRACKET	△	△
		647.7816	AFT BRACKET	△	△
		647.7815	FORWARD BRACKET	△	△
		647.7814	FORWARD BRACKET	△	△
		647.7813	CENTER PLATE LOWER	△	△
		647.7812	CENTER PLATE UPPER	△	△
		647.7811	BRACKET B	△	△
		647.7810	BRACKET A	△	△
PARTS LIST			DRAWING APPROVAL		
NEXT ASSY (S)			DRAWN BY		
647.7300			CHECKED BY		
			E. ANDERSON (P. BRAVO)		
			DATE		
			10/1/01		
			CONTRACT NO.		
			UNLESS OTHERWISE SPECIFIED		
			DIMENSIONS ARE IN INCHES		
			TOLERANCES ARE:		
			FRACTIONS DECIMALS ±.01		
			ANGLES ±.5°		
			SCALE NONE		
			SHEET 1 OF 10		

DART 3030 ENTERPRISE CT.,
SUITE A
VISTA, CA. 92081
(760)-724-5300

BRACKET

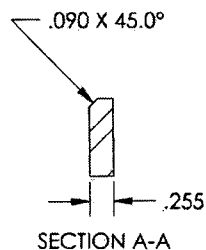
SIZE (CAGE CODE) DWG. NO. REV.
8 07M26 647.7800 A
SCALE NONE SHEET 1 OF 10

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647.7810
647.7811 OPPOSITE

TAG	X LOC	Y LOC	SIZE
A1	9.092±.002	3.332±.002	Ø.201 THRU
A2	6.906±.002	3.083±.002	Ø.201 THRU
A3	4.720	2.835±.002	Ø.201 THRU
B1	7.306±.002	.397±.002	Ø.177 THRU
B2	7.203±.002	2.369±.002	Ø.177 THRU
B3	6.050±.002	.415±.002	Ø.177 THRU
B4	5.961±.002	2.228±.002	Ø.177 THRU
B5	4.800±.002	.433±.002	Ø.177 THRU
B6	4.719±.002	2.088±.002	Ø.177 THRU
B7	3.550	.450	Ø.177 THRU
B8	3.476	1.947	Ø.177 THRU
B9	2.575	2.475	Ø.177 THRU
B10	2.380	.400	Ø.177 THRU
B11	1.250	.400	Ø.177 THRU
B12	1.160	1.220	Ø.177 THRU
B13	.500	.400	Ø.177 THRU

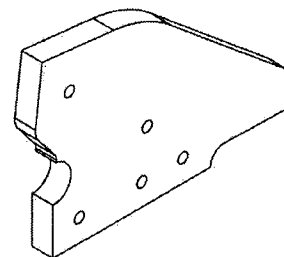


647.7810 SHOWN
647.7811 OPPOSITE

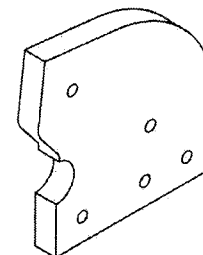
ORIGINAL DATE 11/05/09		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY E. ANDERSON		CHECKED BY P. BRAVO	
DRAWING APPROVAL 11/17/09		APICAL INDUSTRIES INC. DBA DART AEROSPACE	
CONTRACT NO.		BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .01 3 PLACE DECIMALS .005 ANGLES ± .5°		SHEET B 07M26	REV. A
SCALE NONE		SHEET 2 OF 10	

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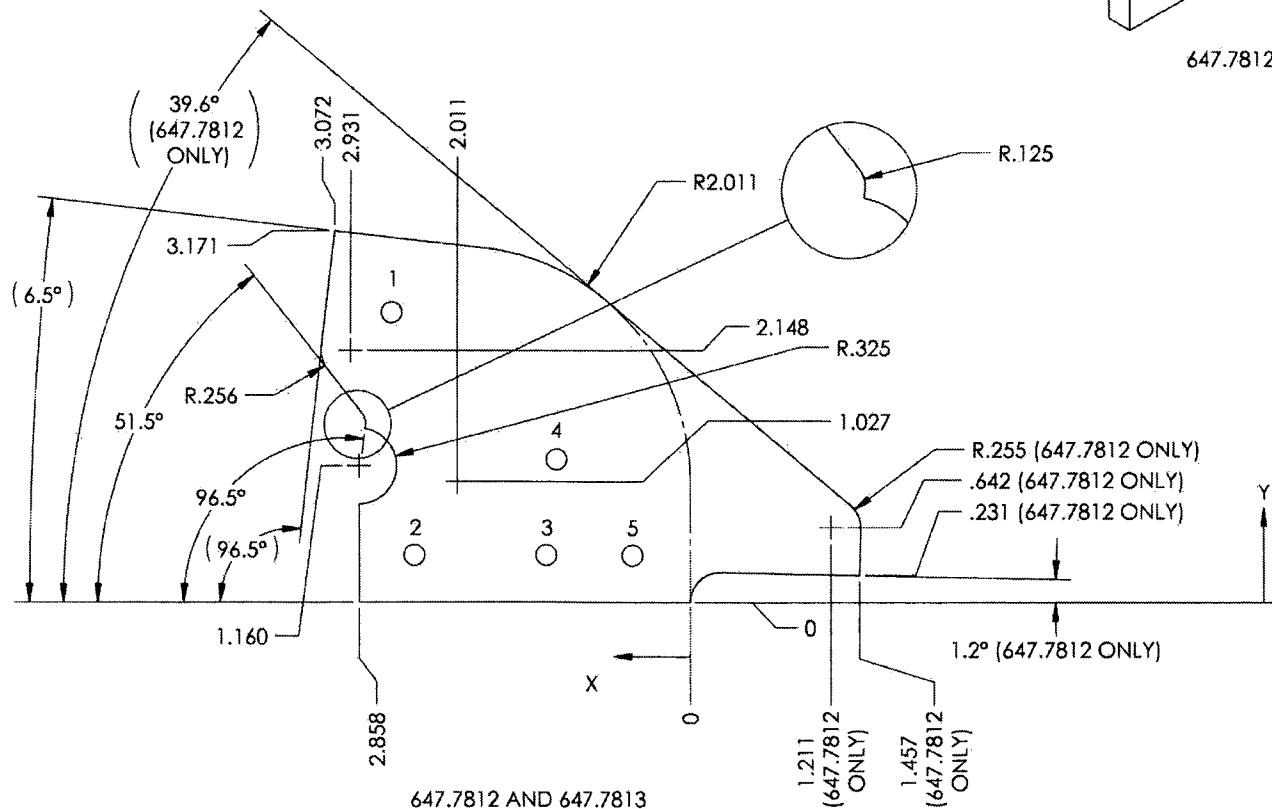
TAG	X LOC	Y LOC	SIZE
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2	2.380±.002	.400±.002	Ø.177 THRU
3	1.250±.002	.400±.002	Ø.177 THRU
4	1.160±.002	1.220±.002	Ø.177 THRU
5	.500±.002	.400±.002	Ø.177 THRU



647.7812

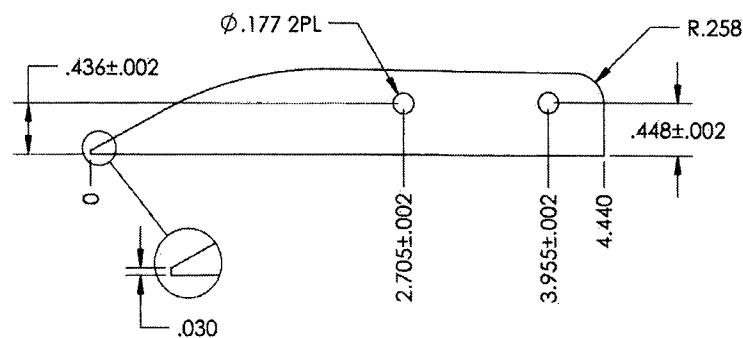
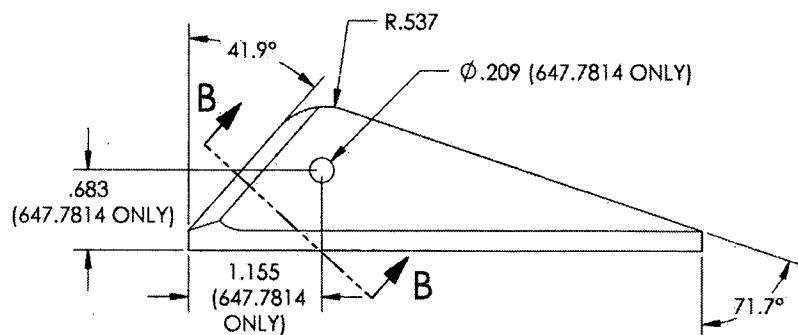
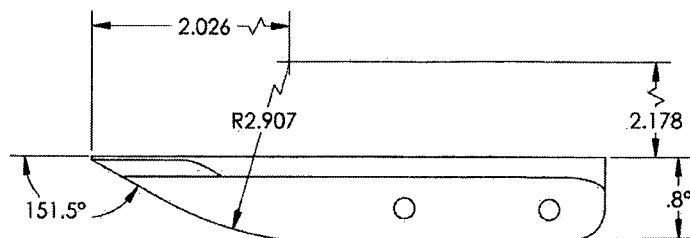


647.7813

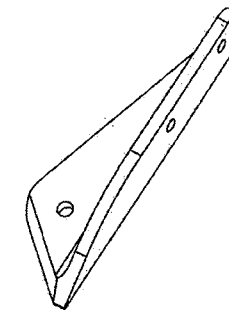


ORIGINAL DATE 11-05-00		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5500	
DRAWN BY E. ANDERSON / J. BRAY		DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL J. BRAY		BRACKET	
CONTRACT NO.		SIZE B	REV. A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE PERFORMED TO SPACEPLAN. 2 PLACE DECIMALS RND. SPACE DECIMALS 2000 ANGLES ± .5°		CAGE CODE 07M16	INV. NO. 647.7800
SCALE NONE		SHEET 3 OF 10	

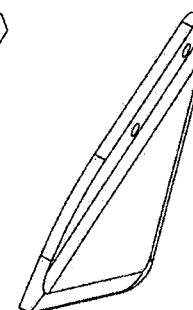
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



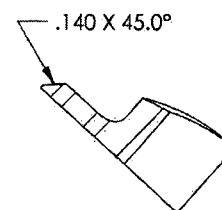
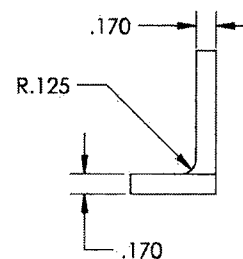
647.7814 SHOWN
647.7815 OPPOSITE



647.7814



647.7815

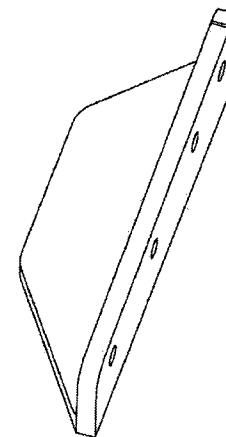
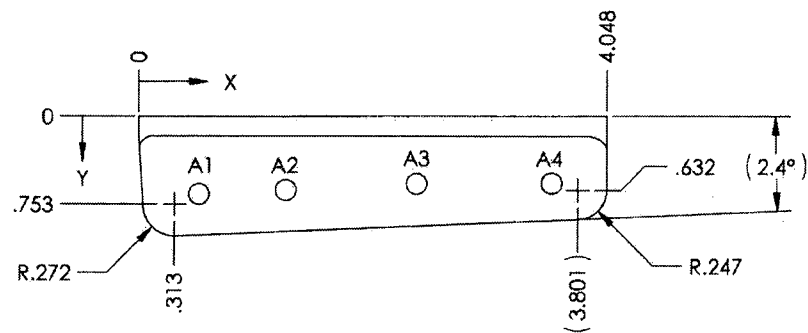


SECTION B-B

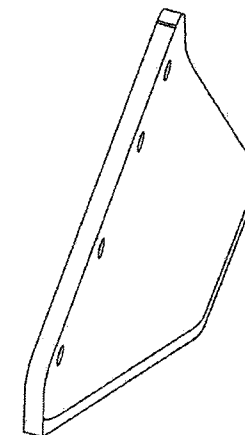
ORIGINAL DATE 11-05-09	3030 ENTERPRISE CT., SUITE A VISTA, CA, 92081 (760)-724-5300		
DRAWN BY E. ANDERSON (P. SPAYC)	DART AEROSPACE		
DRAWING APPROVAL P. SPAYC	APICAL INDUSTRIES, INC. DBA DART AEROSPACE		
CONTRACT NO.	BRACKET		
UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DECIMALS ARE 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ± .5°	SHEET B	CAGE CODE 07M26	DWG. NO. 647.7800
	SCALE NONE	REV. A	SHEET 4 OF 10

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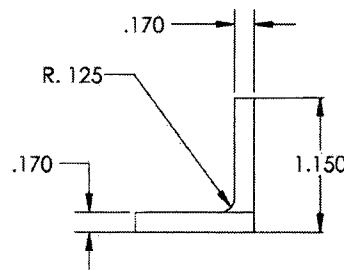
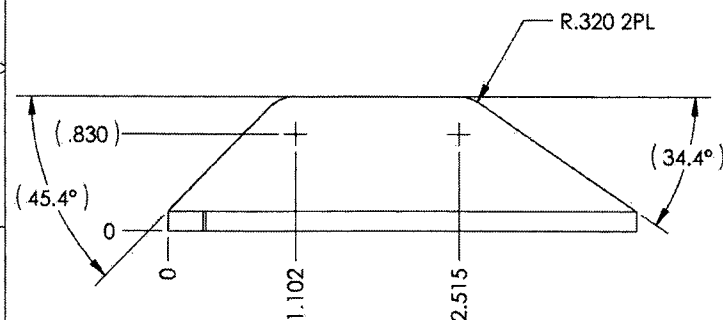
TAG	X LOC	Y LOC	SIZE
A1	.527±.002	.666±.002	Ø.177 THRU
A2	1.276±.002	.631±.002	Ø.177 THRU
A3	2.404±.002	.578±.002	Ø.177 THRU
A4	3.576±.002	.573±.002	Ø.177 THRU



647.7816



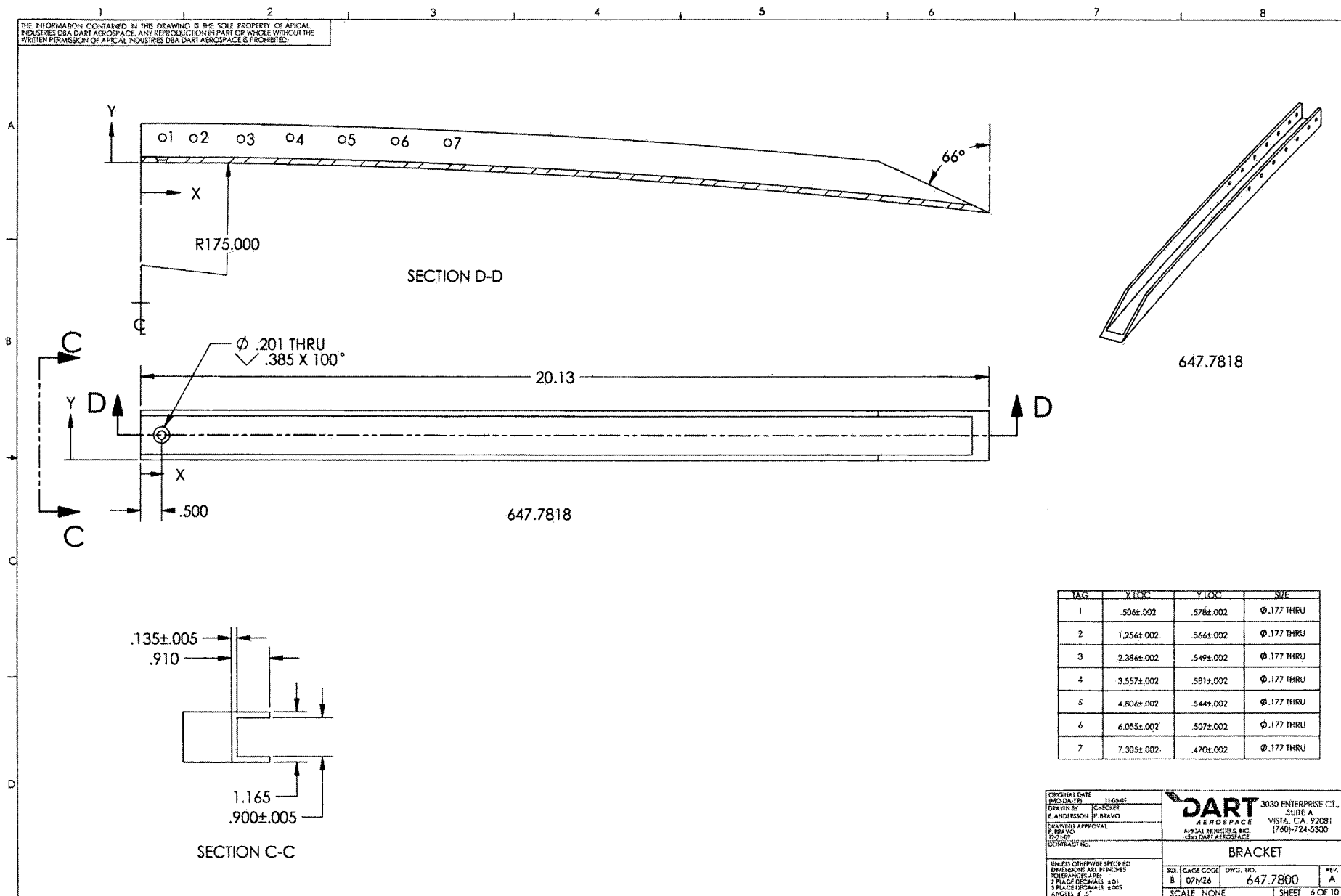
647.7817



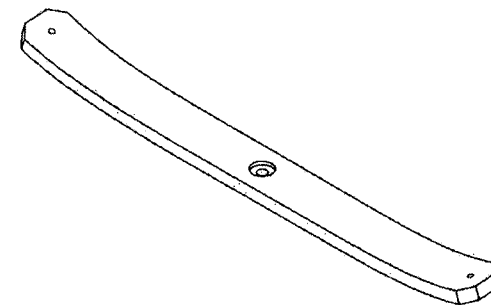
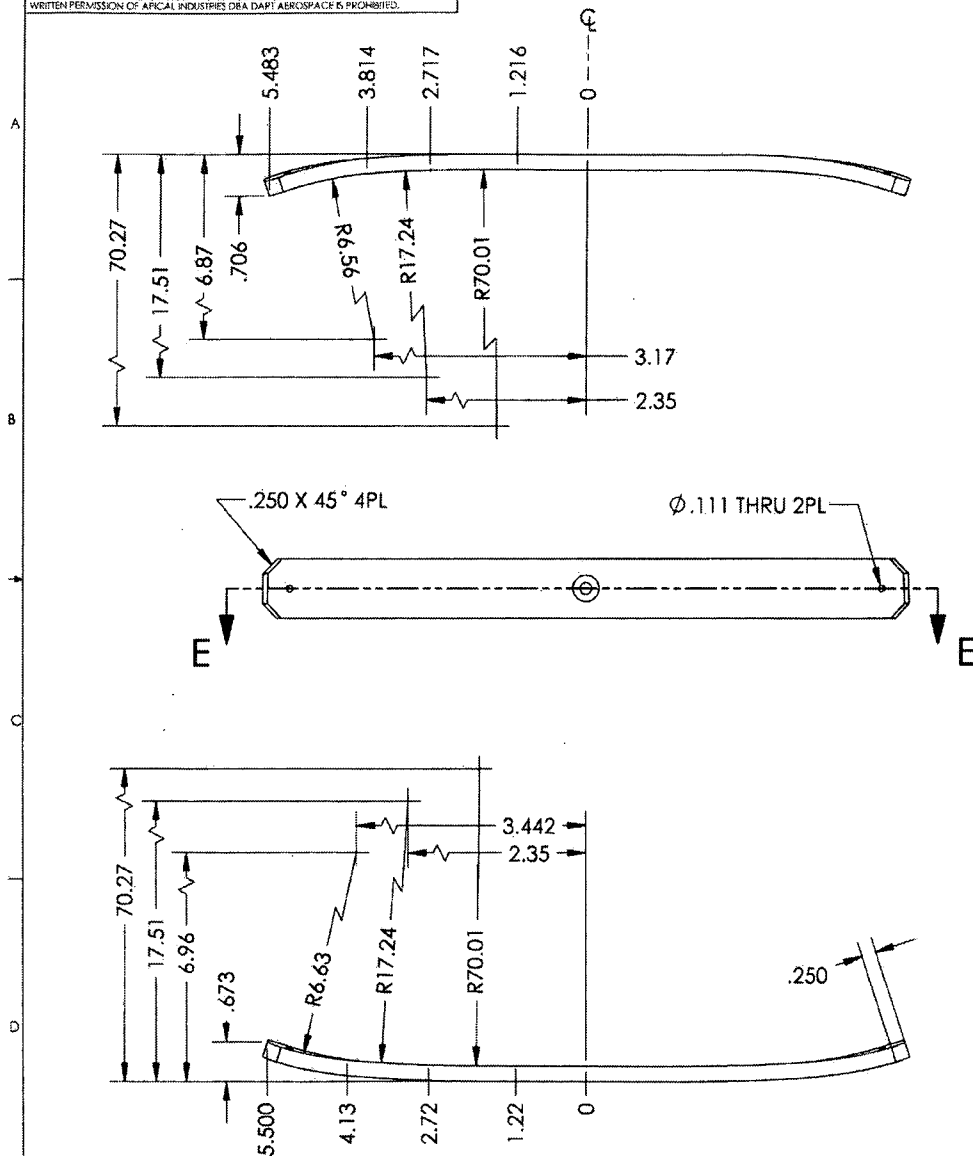
647.7816 SHOWN
647.7817 OPPOSITE

ORIGINAL DATE 11-28-02		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY C. ANDERSON		DART AEROSPACE APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL 12-01-02		BRACKET	
CONTRACT NO.		REV. A	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .005 3 PLACE DECIMALS .0005 ANGLES ±.2°		SERIAL CODE B 07M26	DWG NO. 647.7800
SCALE NONE		SHEET 5 OF 10	

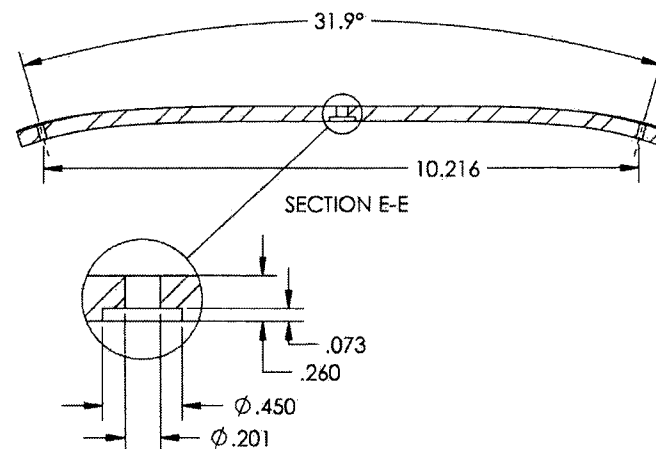
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



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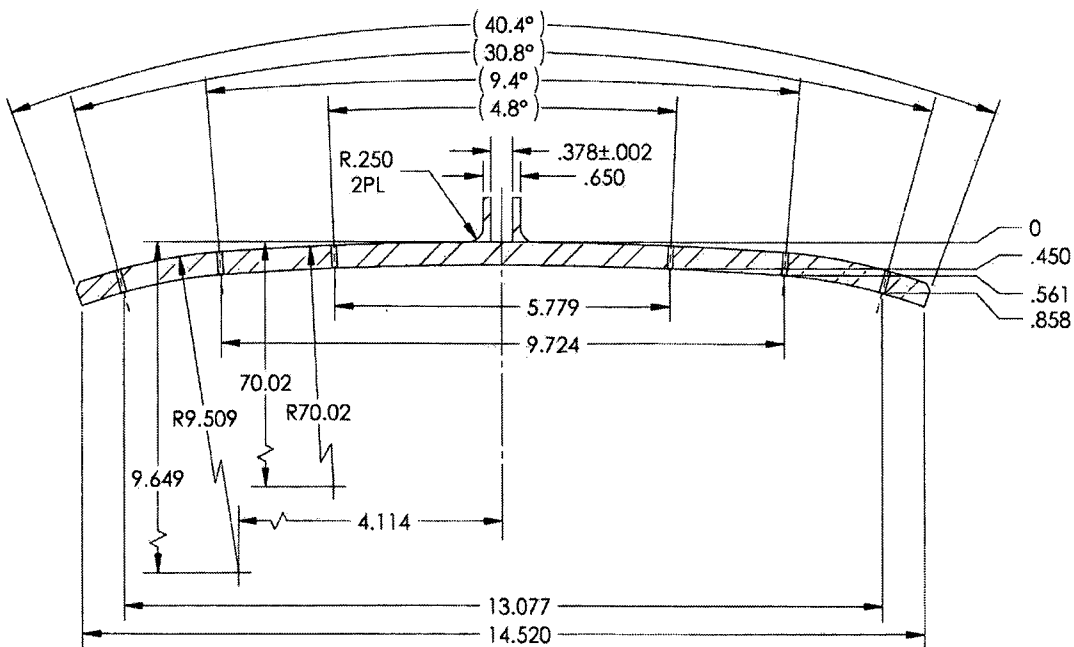
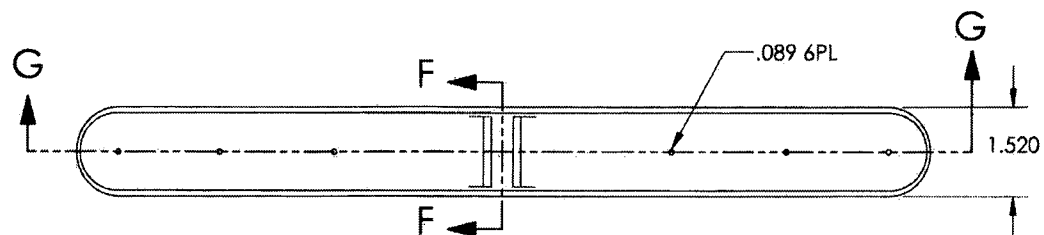


647.7819

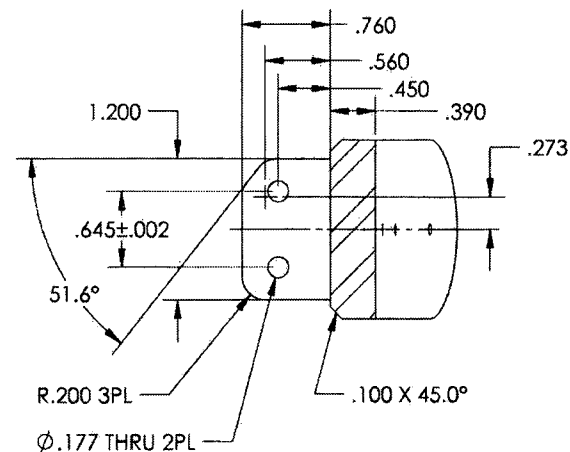
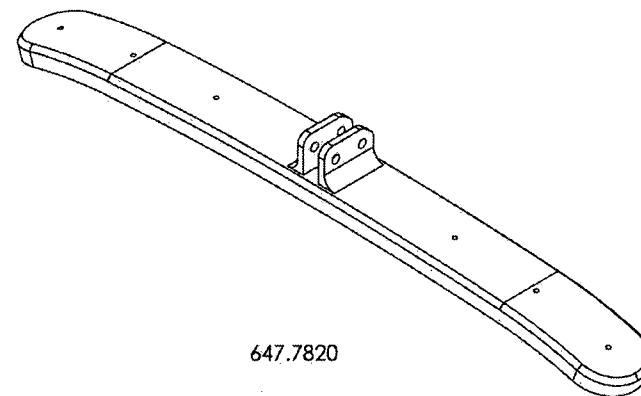


ORIGINAL DATE (APPROPRIATE) 11-05-78		DART 3030 ENTERPRISE CT., SUITE A AEROSPACE VISTA, CA 92081 (760) 724-5300 APICAL INDUSTRIES, INC. (DBA DART AEROSPACE)	
DRAWN BY E. ANDERSON		CHECKED P. BRAVO	
DRAWING APPROVAL P. BRAVO 11-21-78		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 2 PLACE DECIMALS ±.005 ANGLES ± 3°			
SHEET B	CAGE CODE 07M26	DWG. NO. 647.7800	REV. A
SCALE NONE		SHEET 7 OF 10	

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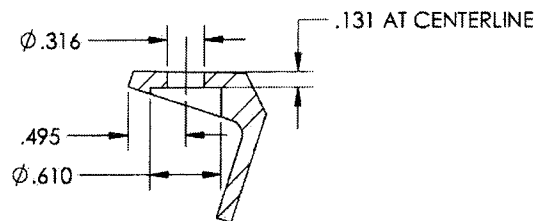
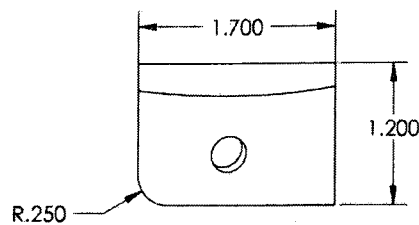
SECTION G-G



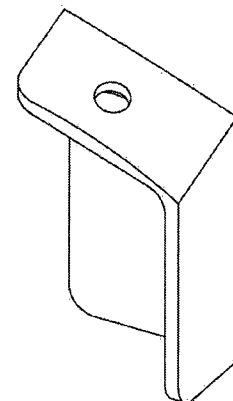
SECTION F-F

ORIGINAL DATE (N/A)	11-15-09	DART AEROSPACE 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY E. ANDERSON	CHKD BY P. BRAVO	APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAVO 12-21-09		CONTRACT NO.	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.001 ANGLES ±.5°		SEE: (N/A)	SCALE: NONE
DWG. NO. 647.7800		REV. A	SHEET 8 OF 10

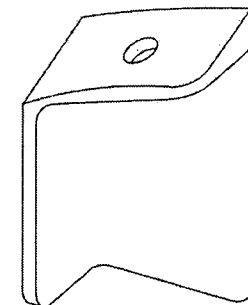
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.



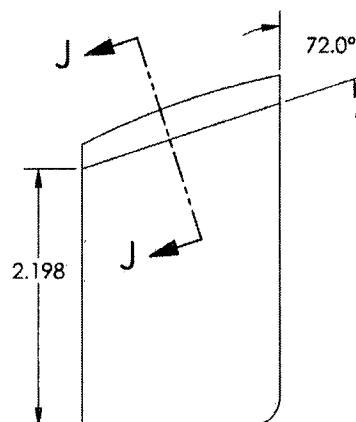
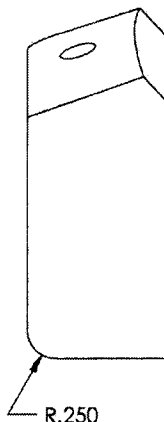
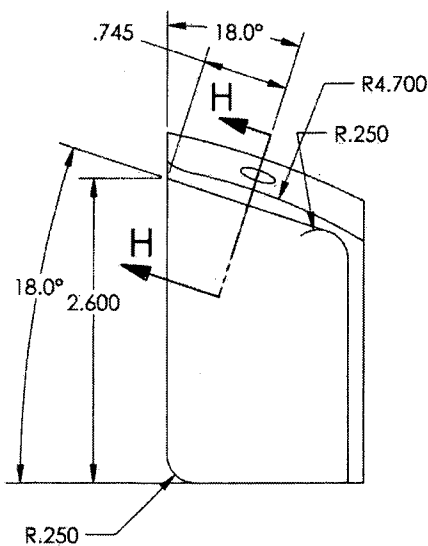
SECTION H-H



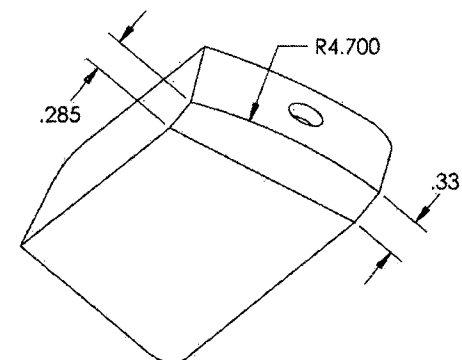
647.7821



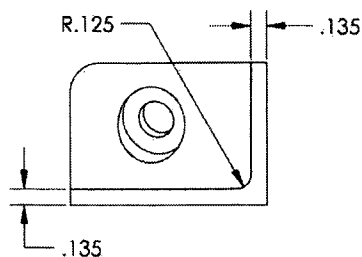
647.7822



SECTION J-J



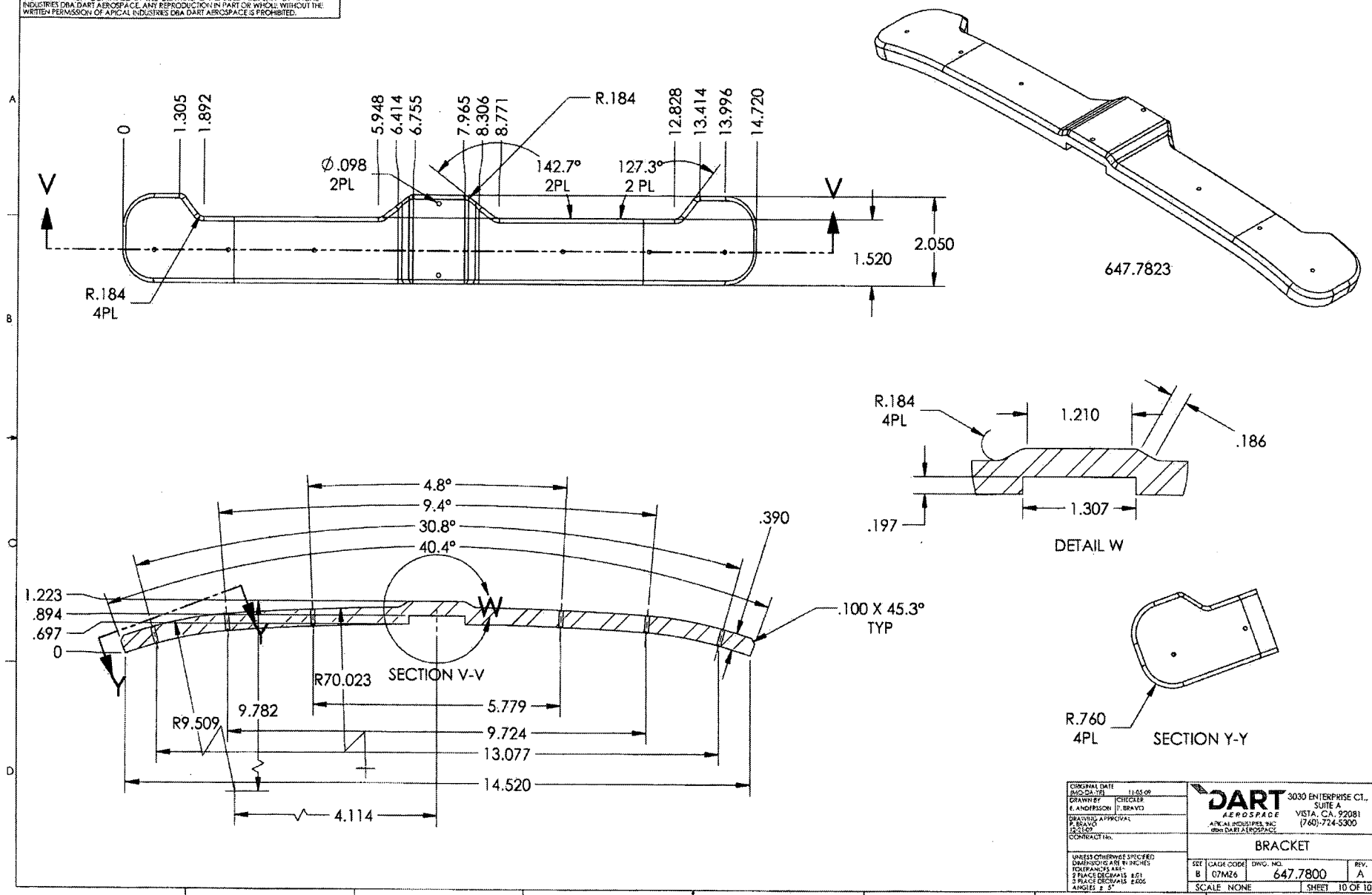
SECTION K-K



647.7821 SHOWN
647.7822 OPPOSITE

ORIGINAL DATE 11-25-09		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA 92081 (760) 724-5300	
DRAWN BY E. ANDERSON	CHECKED BY P. BRAVO	APICAL INDUSTRIES, INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAVO 12-21-09		BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ± .01 ANGLES ± .5°	SEE CAGE CODE B 07M26	DWG. NO. 647.7800	REV. A
SCALE: NONE		SHEET 9 OF 10	

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ORIGINAL DATE 11-03-09		DART 3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300 AEROSPACE ATKINS INDUSTRIES, INC. DATA DART AEROSPACE	
DRAWN BY	CHECKER		
A. ANDERSON	J. BRAY		
DRAWING APPROVAL	P. BRAY		
DATE	11-03-09	BRACKET	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 ANGLES ±.5°		REV.	A
SET	8	SCALE	NONE
DATE CODE	07M26	DWG. NO.	647.7800
SHEET		SHEET 10 OF 10	



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37017**

Purchase Order Date 7/12/2017

PO Print Date 7/19/2017

Page Number 8 of 9

Order From :

VC-ATG001

A.T.G. INDUSTRIES INC.
731 INDUSTRIELLE ROAD
ROCKLAND, ON K4K 1T2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone

613-446-4544

Ship To Contact

Ship To Phone

Ship Via:

VENDOR'S TRUCK

Ship Acct:

Buyer

Diane Baker

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total:

\$62.50

17 161733

647.7611 Lower Deflector
Rev. N/C

8/14/2017

4.00

\$12.05

\$48.20

Yes

8/14/2017

AS PER MPP-172 SECTION 2.1,
HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2
AS PER MPP-172 SECTION 4.2,
PRIME AS PER IAW MIL-PRF-23377 TYPE I CLASS N

Line Total:

\$48.20

18 161708

647.7811 Bracket B Rev.
A

7/21/2017

4.00

\$14.50

\$58.00

Yes

7/21/2017

AS PER MPP-172 SECTION 2.1,
HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2
AS PER MPP-172 SECTION 4.2,
PRIME AS PER IAW MIL-PRF-23377 TYPE I CLASS N

Line Total:

\$58.00

PO Instructions: PRIMER IS SUPPLIED BY DART

Note:

7/19/2017

DAS
38
9-89

8017-7-25



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 913566

Date: 21-Jul-17

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chantal Lavoie
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
4 ea	Part: 647.7811 Bracket B Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21386	Rev: A PO: PO37017 Line: 18	DAS 38 9-89 SP 17-725
6 ea	Part: 647.7810 Bracket A Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 21377	Rev: A FO: PO37017 Line: 9	
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>21/07/2017</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of receipt.			
Made in Canada.			